SRF-M55

SERVICE MANUAL

Ver 1.0 1999.09

AEP Model
E Model
Chinese Model

SPECIFICATIONS

Time display: 24-hour system
Frequency: 87.5 – 108 MHz
Channel step: 0.05 MHz or 0.25 MHz*
* The frequency display is raised or lowered by a step of 0.1 MHz. (Example: Frequency 88.00 and 88.05 MHz is displayed as "88.0 MHz".)
Output: ∩ (headphones) jack (ϕ 3.5 mm stereo minijack)
Power output: 7 mW + 7 mW (headphones) (at 10 % harmonic distortion)
Power requirements:
1.5 V DC, one R03 (size AAA) battery
Power auto off: 90 minutes
Dimensions: Approx. 39.2 × 78 × 16.8 mm (w/h/d) (Approx. $1^{9}/_{16} \times 3^{1}/_{8} \times {}^{11}/_{16}$ inches) incl. projecting parts and controls
Mass: Approx. 47.2 g (1.6 oz) incl. headphones
Supplied accessories: Stereo headphones (1)

Design and specifications are subject to change without notice.

FM STEREO PLL SYNTHESIZED RADIO

MICROFILM

SONY®

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Flexible Circuit Board Repairing

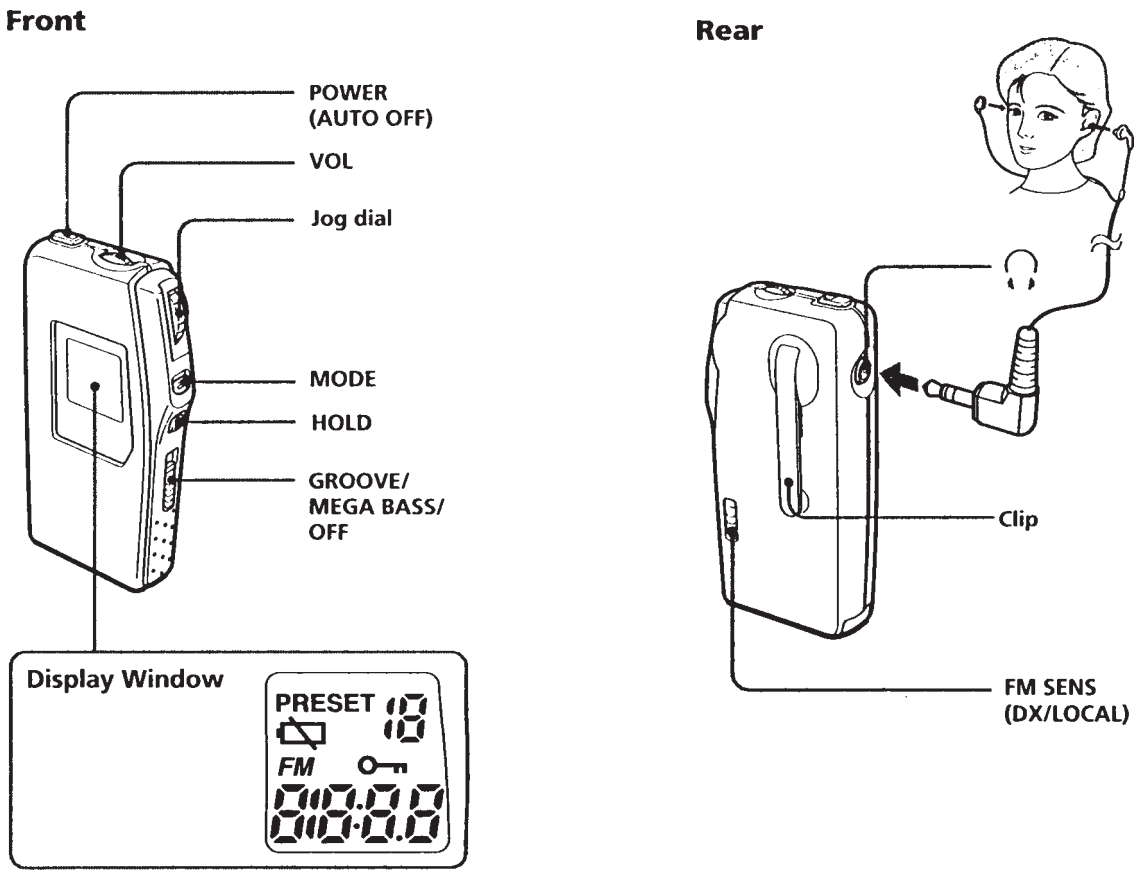
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SECTION 1
GENERAL

LOCATION AND FUNCTION OF CONTROLS



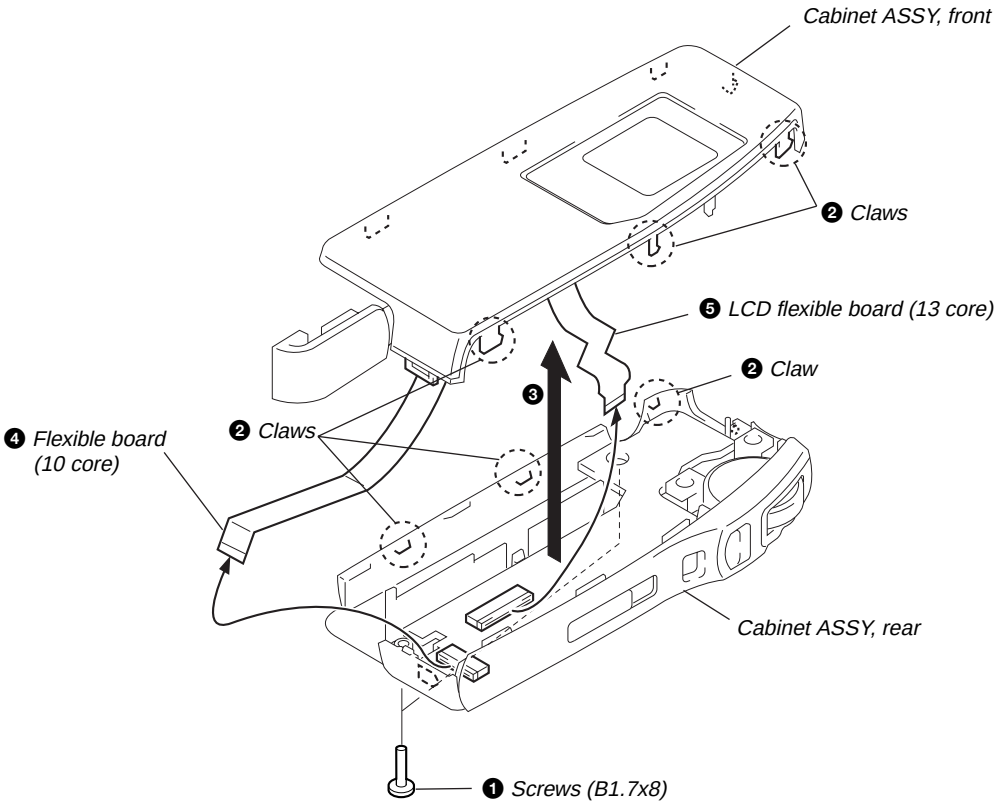
SECTION 2
DISASSEMBLY

● The equipment can be removed using the following procedure.

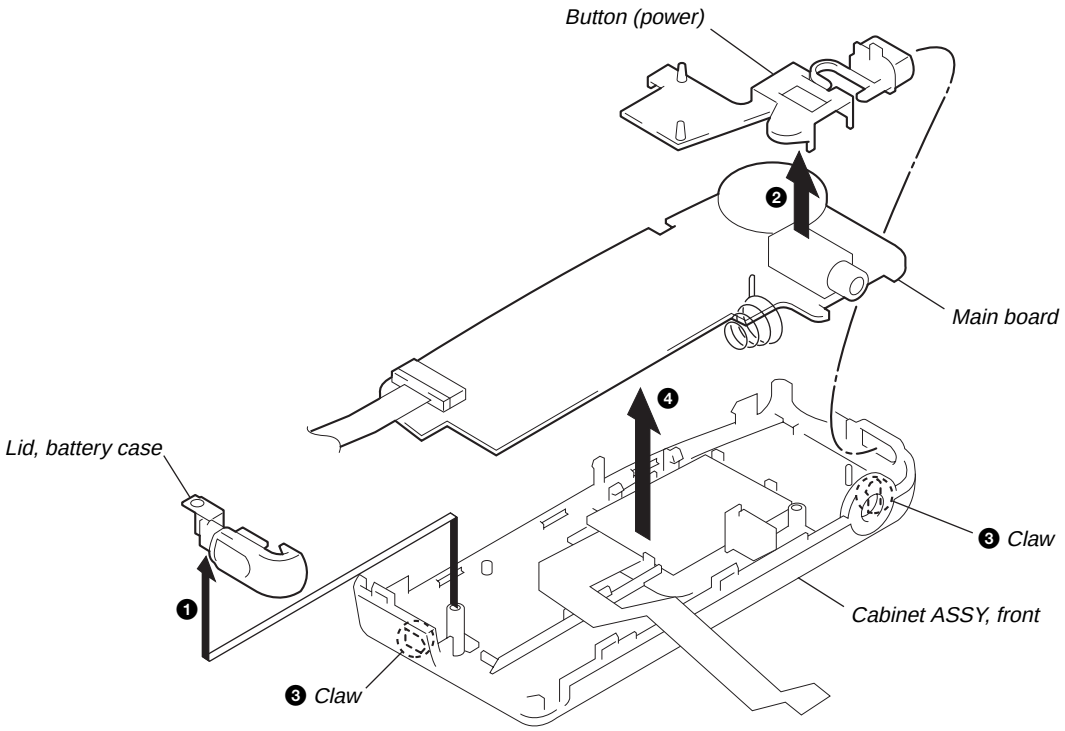
Set → Cabinet ASSY, Front → Main board → LCD201
Set → Cabinet ASSY, Rear → Microcomputer board

Note : Follow the disassembly procedure in the numerical order given.

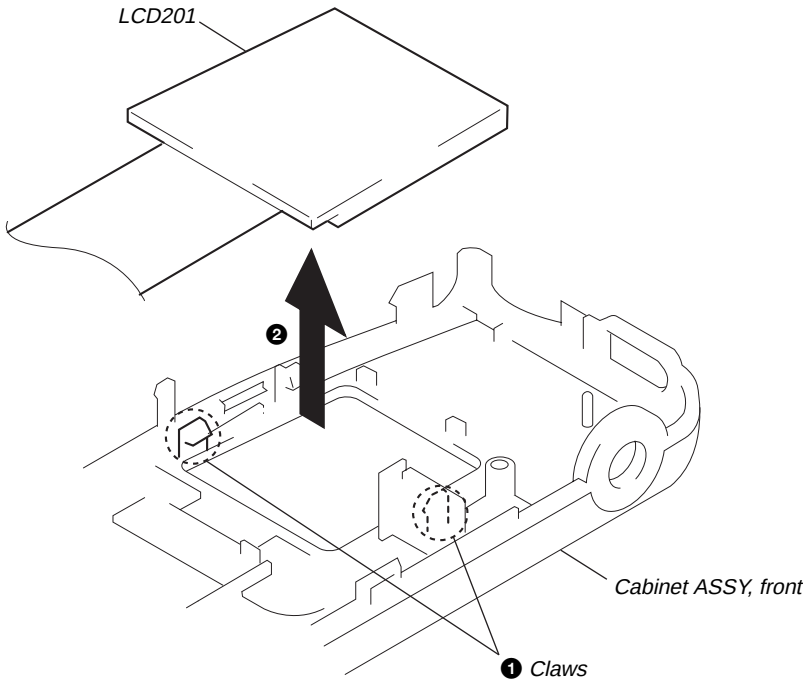
2-1. "CABINET ASSY, FRONT", "CABINET ASSY, REAR"



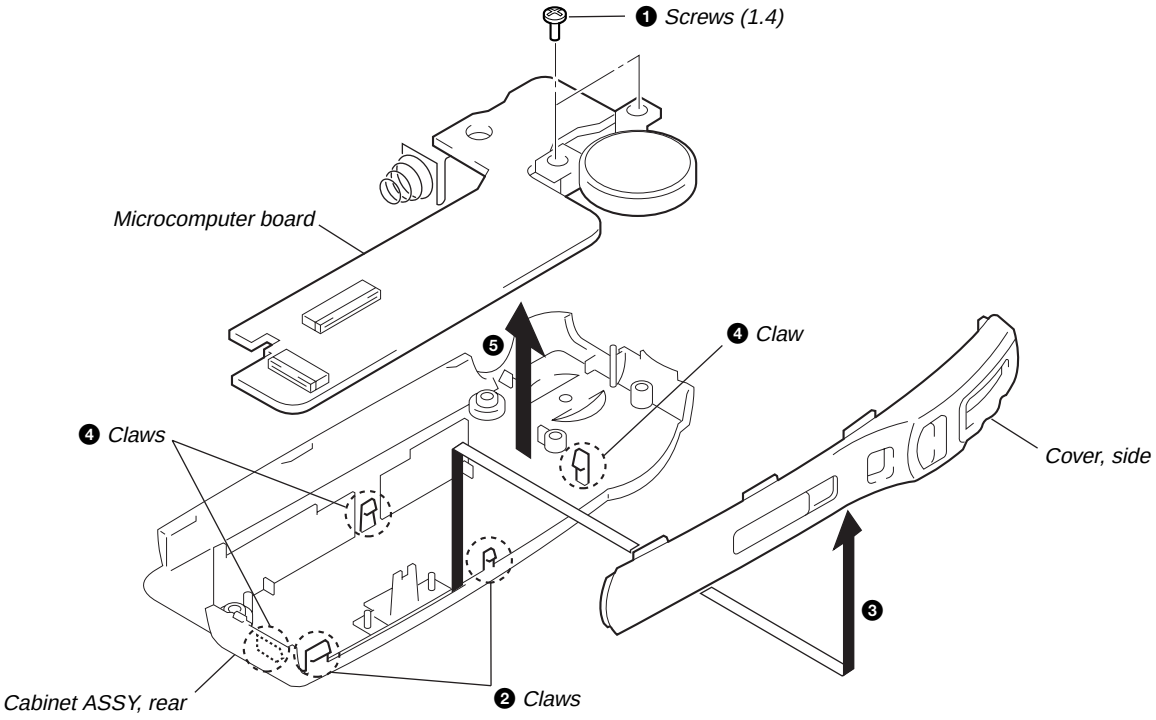
2-2. MAIN BOARD



2-3. LCD201



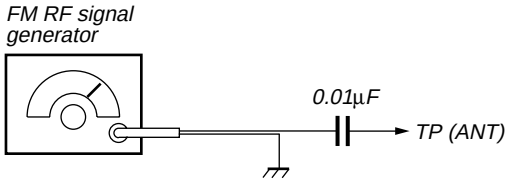
2-4. MICROCOMPUTER BOARD



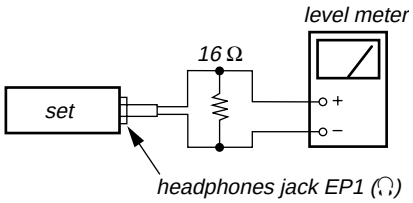
SECTION 3
ADJUSTMENTS

FM Section | 0 dB=1μV

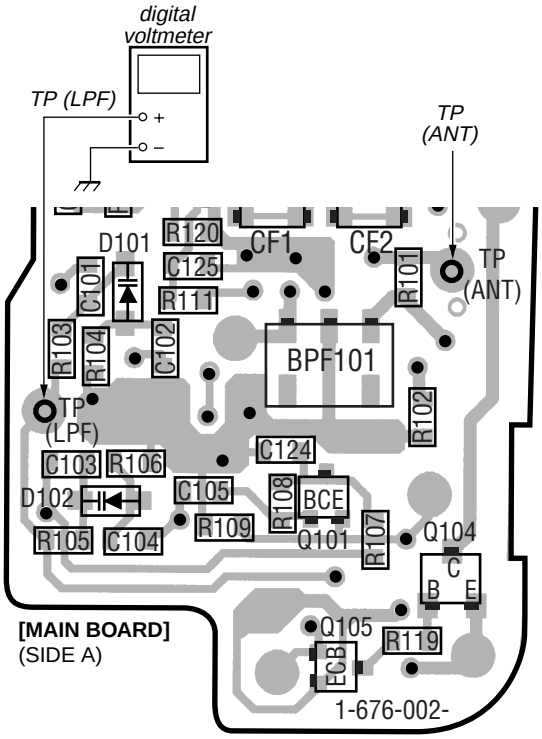
Setting :



22.5kHz frequency deviation by 400Hz signal.
Output level : as low as possible



Connection:
For FM frequency coverage adjustment



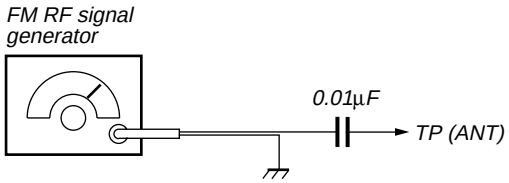
- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM IF ADJUSTMENT		
Adjust for a maximum reading on level meter.		
T1	10.7MHz	

FM FREQUENCY COVERAGE ADJUSTMENT		
Adjust for a maximum reading on level meter.		
CT2	87.5MHz	adjustment value: 2V standard value: 1.5 – 2.5V
Confirm	108.0MHz	standard value: 9 – 13V

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
CT1	98MHz

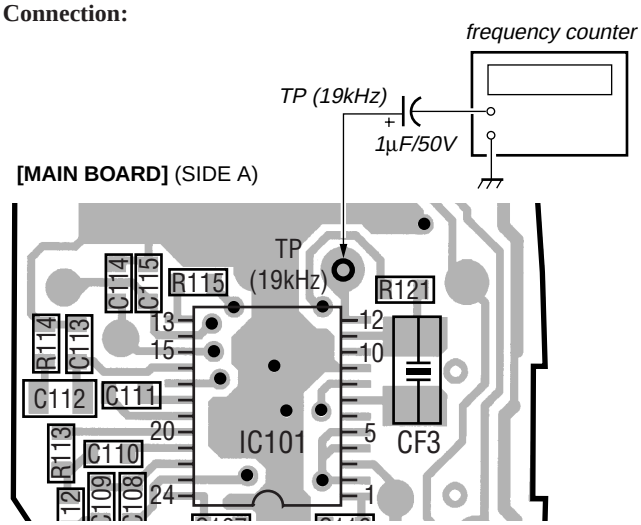
FM STEREO (19kHz) Adjustment
Setting :



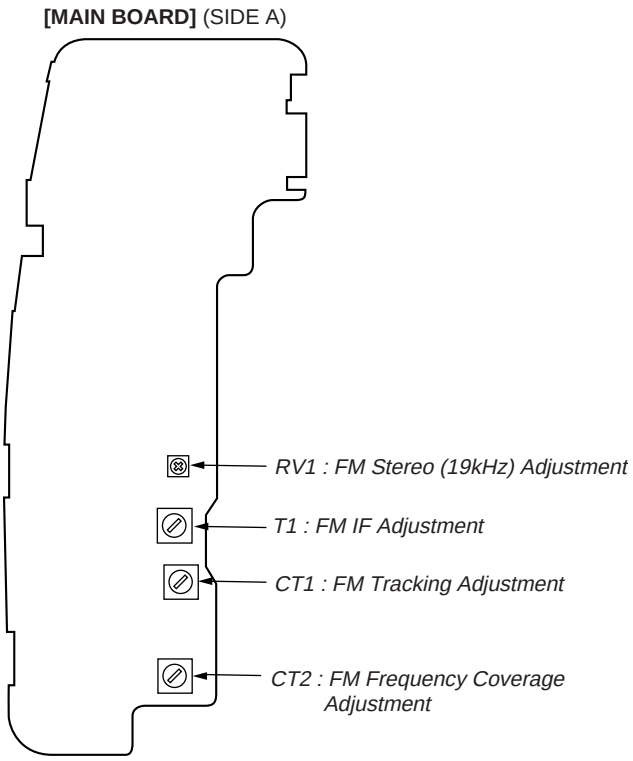
Carrier frequency : 98MHz
Modulation : 1kHz, 22.5kHz deviation
Output level : 1mV (more than 60dB)

Procedure :
1. Connect the frequency counter to TP (19kHz).
2. Turn the set to 98MHz.
3. Adjust RV1 for 19kHz reading frequency counter.
   Standard Value : 18.9 –19.1kHz

Connection:



Adjustments Location :


[MAIN BOARD] (SIDE A)
RV1 : FM Stereo (19kHz) Adjustment
T1 : FM IF Adjustment
CT1 : FM Tracking Adjustment
CT2 : FM Frequency Coverage Adjustment

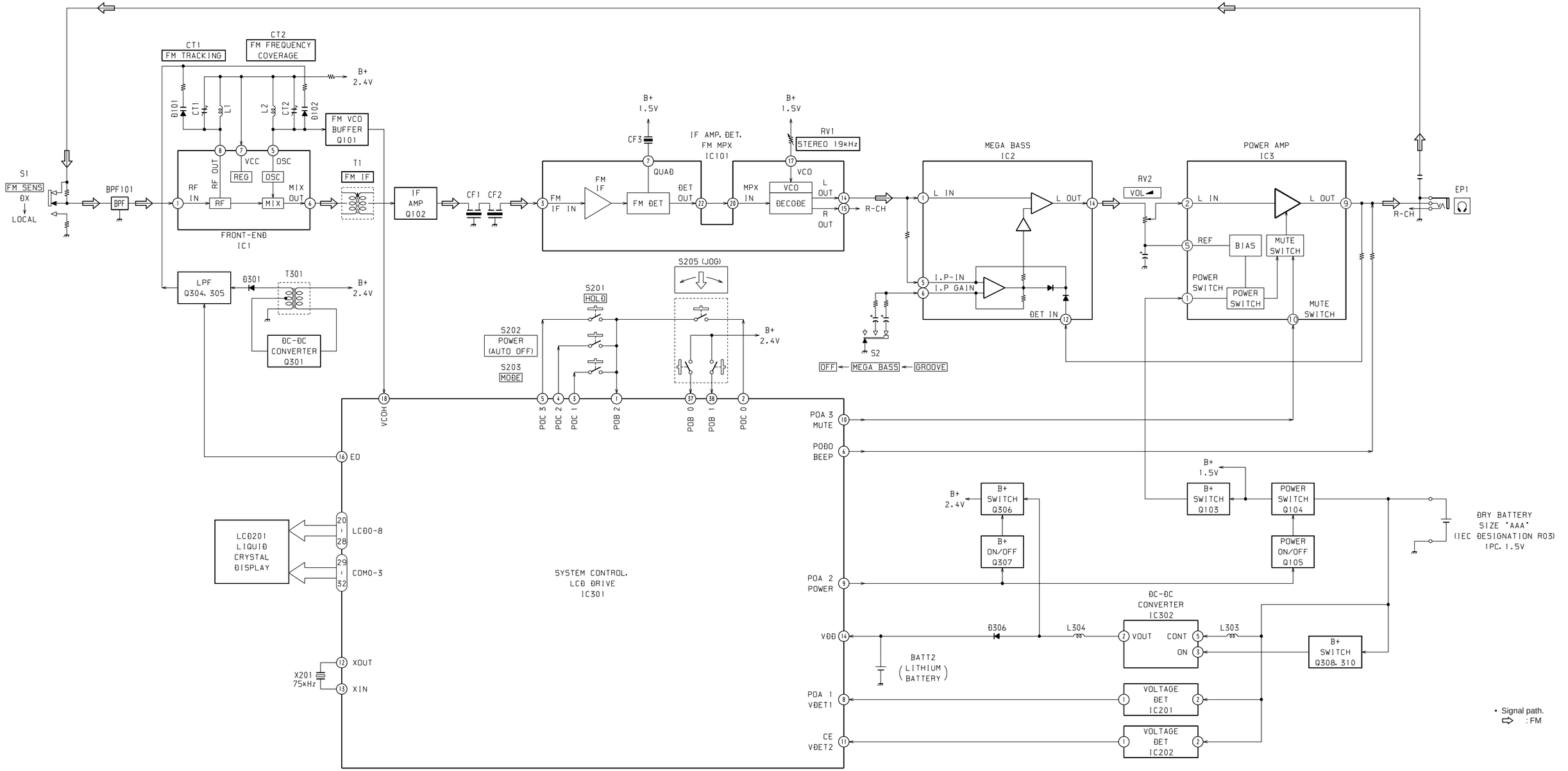
SECTION 4
DIAGRAMS

4-1. EXPLANATION OF IC TERMINALS

IC301 μPD17015GS-556-GJG (SYSTEM CONTROL, LCD DRIVE)

Pin No.	Pin name	I/O	Description
1	POB2	I	Key return input.
2	PCO0	O	Key source output.
3	PCO1	O	Key source output.
4	PCO2	I	Power (AUTO OFF) key input.
5	PCO3	I	HOLD key input.
6	POD0/BEEP	O	Beep output.
7	POA0	I	Key return input (Fixed at "L").
8	POA1	I	Voltage decrease information input. ☜ : On-and-off
9	POA2	O	Power ON/OFF output. "H" : ON
10	POA3	O	Mute signal output. "H" : Mute ON
11	CE	I	Voltage decrease information input. ☜ : Lighting
12	XOUT	O	System clock output (75 kHz).
13	XIN	I	System clock input (75 kHz).
14	VDD	—	Power supply.
15	GND	—	Ground.
16	EO	O	PLL error output.
17	VREG	O	Voltage regulator output.
18	VCOH	I	FM VCO input.
19	VCOL	—	Not used (OPEN).
20 – 28	LCD 0 – 8	O	LCD segment output.
29 – 32	COM 0 – 3	O	LCD common output.
33	VLCD1	—	Power supply for LCD drive.
34	CAP1	—	Connecting pins of the capacitor for LCD drive voltage.
35	CAP0		
36	VLCD0	—	Power supply for LCD drive.
37	POB0	I	Key return input.
38	POB1		

4-2. BLOCK DIAGRAMS



4-3. PRINTED WIRING BOARDS

● **Semiconductor Location**

Ref. No.	Location
D101	F-11
D102	F-11
D301	F-4
D303	F-4
D305	D-5
D306	D-5
IC1	F-8
IC2	D-8
IC3	C-5
IC101	E-12
IC201	D-3
IC202	D-3
IC301	C-5
IC302	E-5
Q101	F-12
Q102	E-11
Q103	B-12
Q104	G-12
Q105	G-12
Q301	G-5
Q304	D-4
Q305	D-4
Q306	F-5
Q307	G-5
Q308	F-5
Q310	F-5

Note on Printed Wiring Boards:

Note:

- ○—— : parts extracted from the component side.
- ● : Through hole.
- ▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

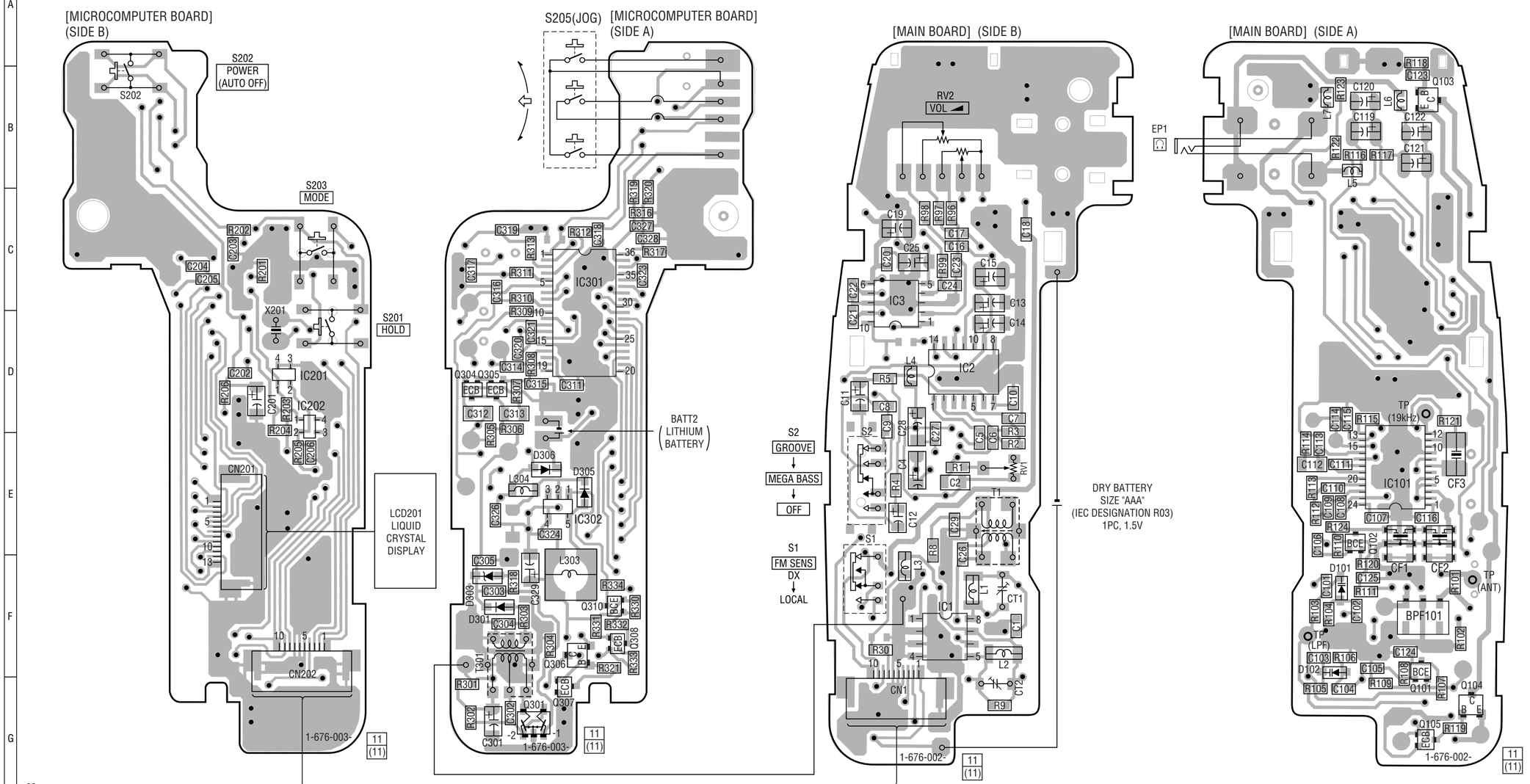
Caution:

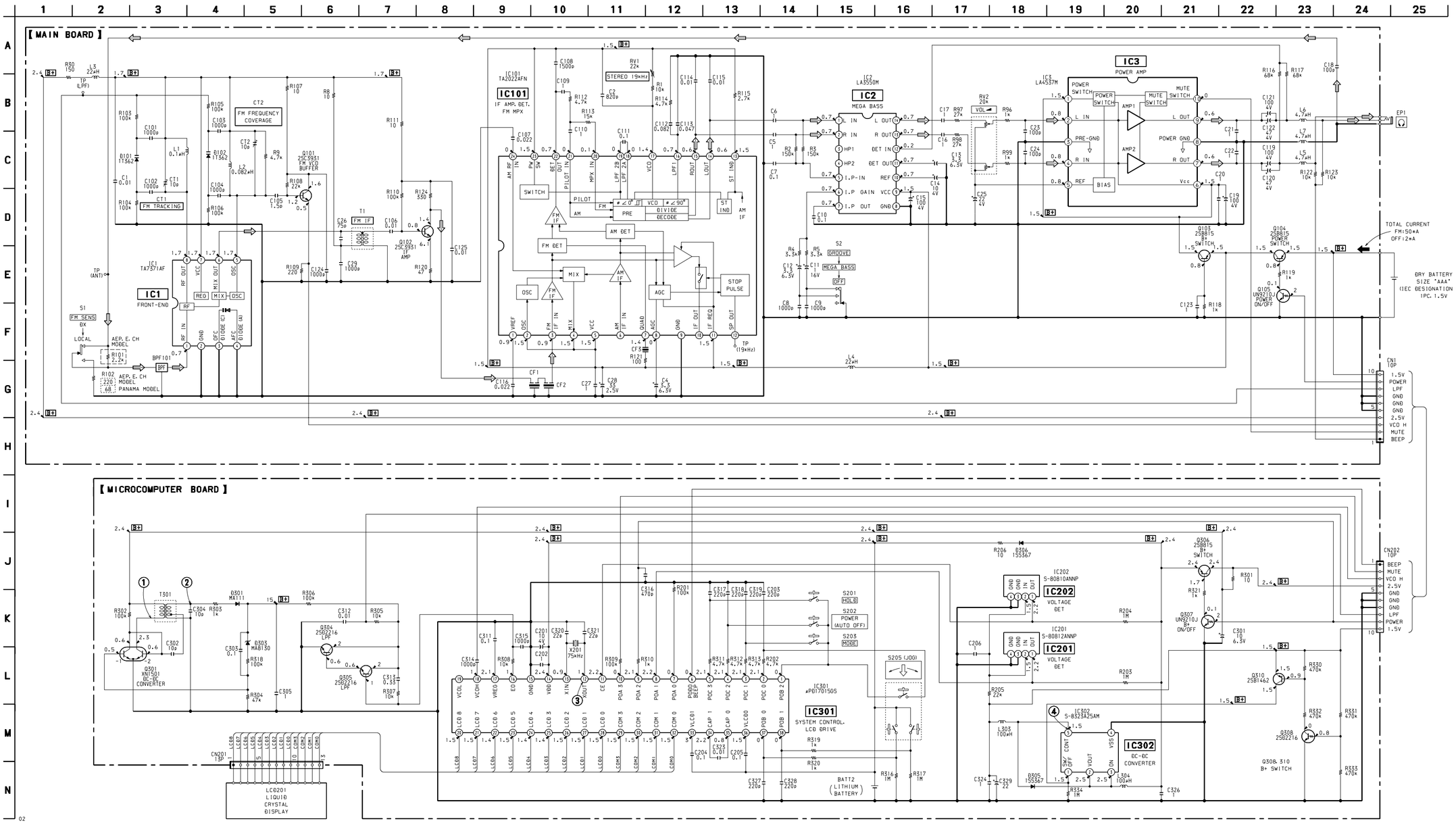
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

Note on Schematic Diagram:

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line.
- ▭ : adjustment for repair.
- Power voltage is dc 1.5V and fed with regulated dc power supply from battery terminal.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM





● WAVEFORMS

① 4.6Vp-p, 360 nsec — Q301-2 ⓒ — VOLT/DIV : 1 V AC, TIME/DIV : 0.1 μsec

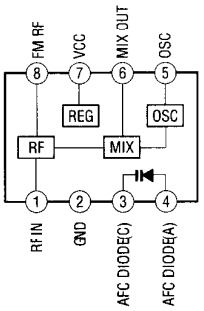
② 5.2Vp-p, 982 nsec — T301 — VOLT/DIV : 1 V AC, TIME/DIV : 0.2 μsec

③ 330mVp-p, 75kHz — IC301 ⑫ XOUT — VOLT/DIV : 0.1 V AC, TIME/DIV : 5 μsec

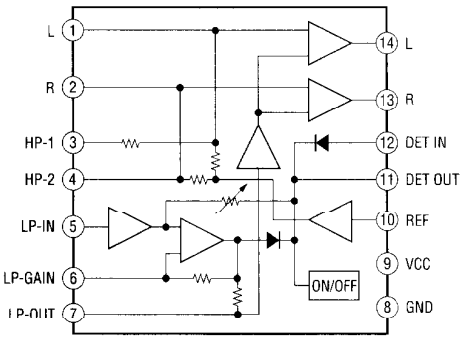
④ 2.9 Vp-p, 21 μsec — IC302 ⑤ — VOLT/DIV : 0.5 V AC, TIME/DIV : 5 μsec

• IC BLOCK DIAGRAMS

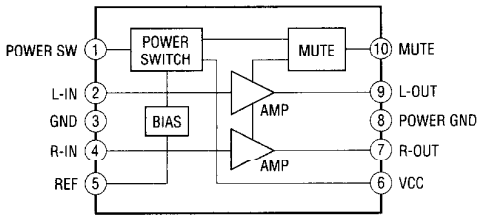
IC1 TA7371AF-EL



IC2 LA3550MTP-1



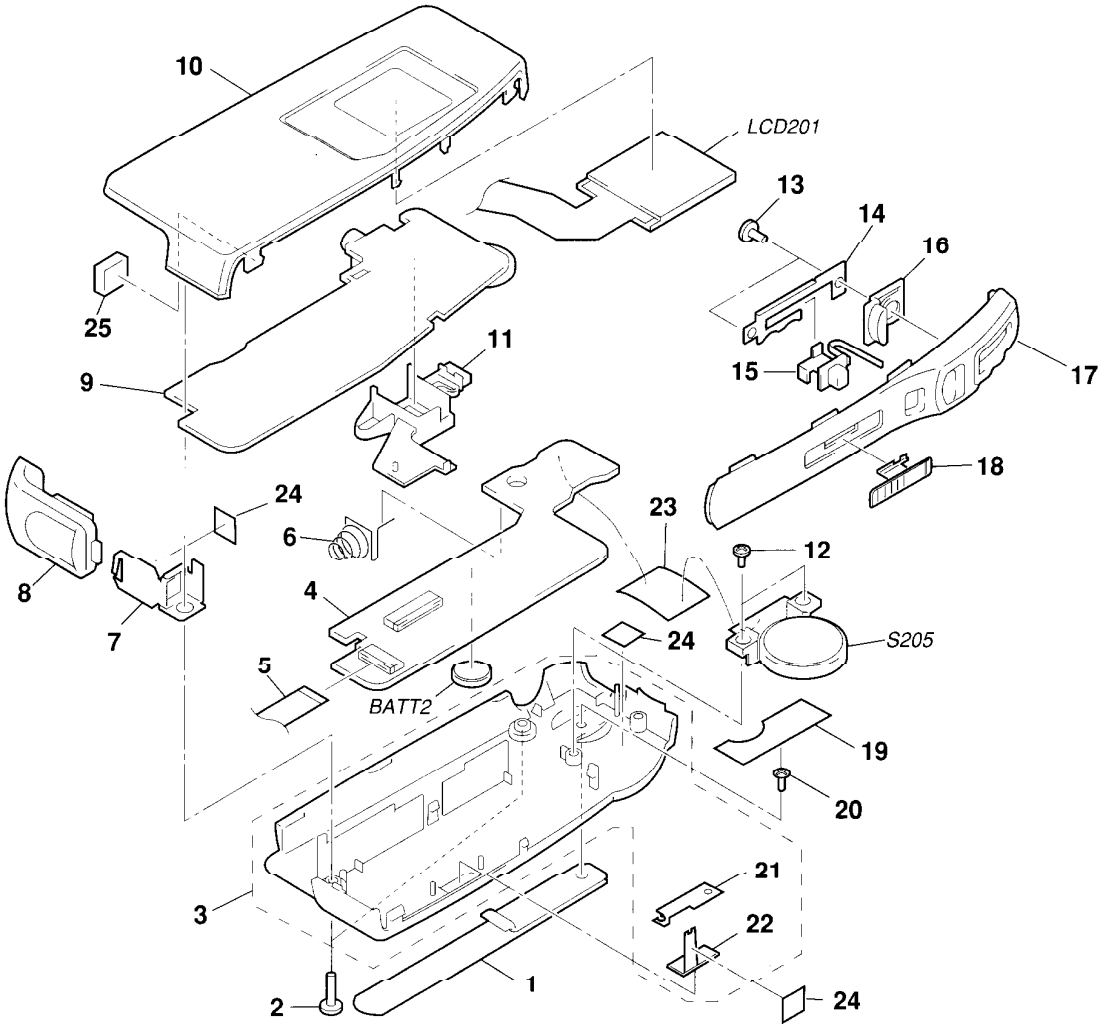
IC3 LA4537M



SECTION 5
EXPLODED VIEW

NOTE :

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ••• (RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CH : Chinese



Ref. No.	Part No.	Description	Remark
1	3-040-278-01	CLIP	
2	3-318-203-21	SCREW(B1.7X8), TAPPING	
3	X-3378-203-1	CABINET ASSY, REAR (SILVER)	
3	X-3378-204-1	CABINET ASSY, REAR (GREEN)	
* 4	A-3683-122-A	MICROCOMPUTER BOARD, COMPLETE	
5	1-676-005-11	FLEXIBLE BOARD(B-B)	
6	3-039-771-01	TERMINAL (-), BATTERY	
7	X-3377-949-1	TERMINAL BOARD ASSY, BATTERY	
8	3-039-759-01	LID,BATTERY CASE (SILVER)	
8	3-039-759-11	LID,BATTERY CASE (GREEN)	
* 9	A-3683-120-A	MAIN BOARD, COMPLETE (AEP,CH,E)	
* 9	A-3683-124-A	MAIN BOARD, COMPLETE (Panama)	
10	X-3378-201-1	CABINET ASSY, FRONT (SILVER)	
10	X-3378-202-1	CABINET ASSY, FRONT (GREEN)	
11	3-039-760-01	BUTTON (POWER)	
12	3-309-597-31	SCREW (1.4), TAPPING,PRECISION	
13	3-894-747-01	SCREW (B1.4X2), TAPPING	
14	3-039-770-01	RETAINER (HOLD)	
15	3-039-764-01	KNOB(HOLD) (SILVER)	

Ref. No.	Part No.	Description	Remark
15	3-039-764-11	KNOB(HOLD) (GREEN)	
16	3-039-761-01	BUTTON (MODE) (SILVER)	
16	3-039-761-11	BUTTON (MODE) (GREEN)	
17	3-039-757-01	COVER, SIDE (SILVER)	
17	3-039-757-11	COVER, SIDE (GREEN)	
18	3-039-763-01	KNOB(GROOVE) (SILVER)	
18	3-039-763-11	KNOB(GROOVE) (GREEN)	
19	3-041-792-01	SHEET,INSULATION	
20	3-318-205-01	SCREW1.7X2.5	
21	3-039-766-01	RETAINER (DX/LOCAL)	
22	3-039-762-01	KNOB(DX/LOCAL) (SILVER)	
22	3-039-762-11	KNOB(DX/LOCAL) (GREEN)	
23	1-676-004-11	FLEXIBLE BOARD(B-E)	
24	3-042-511-01	SPACER	
25	3-042-512-01	CUSHON (A)	
BATT2	1-528-412-11	BATTERY, PAS SECONDARY	
LCD201	1-803-816-11	DISPLAY PANEL, LIQUID CRYSTAL	
S205	1-475-240-11	ENCODER, ROTARY (JOG)	

MAIN

SECTION 6
ELECTRICAL PARTS LIST

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE :Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H

When indicating parts by reference number, please include the board.

- Abbreviation
  CH : Chinese

Ref. No.	Part No.	Description			Remark
*	A-3683-120-A	MAIN BOARD, COMPLETE (AEP,CH,E)			
*	A-3683-124-A	MAIN BOARD, COMPLETE (Panama)			
		**********			
		< BAND PASS FILTER >			
BPF101	1-236-053-11	FILTER, BAND PASS			
		< CAPACITOR >			
C1	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C2	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C4	1-104-912-11	TANTAL. CHIP	3.3uF	20%	6.3V
C5	1-115-156-11	CERAMIC CHIP	1uF		10V
C6	1-115-156-11	CERAMIC CHIP	1uF		10V
C7	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C8	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C9	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C10	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C11	1-104-912-11	TANTAL. CHIP	3.3uF	20%	6.3V
C12	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C13	1-104-912-11	TANTAL. CHIP	3.3uF	20%	6.3V
C14	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C15	1-110-967-11	TANTAL. CHIP	100uF	20%	4V
C16	1-115-156-11	CERAMIC CHIP	1uF		10V
C17	1-115-156-11	CERAMIC CHIP	1uF		10V
C18	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C19	1-110-967-11	TANTAL. CHIP	100uF	20%	4V
C20	1-115-156-11	CERAMIC CHIP	1uF		10V
C21	1-115-156-11	CERAMIC CHIP	1uF		10V
C22	1-115-156-11	CERAMIC CHIP	1uF		10V
C23	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C24	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C25	1-104-847-11	TANTALUM CHIP	22uF	20%	4V
C26	1-164-155-11	CERAMIC CHIP	75PF	5%	50V
C27	1-115-156-11	CERAMIC CHIP	1uF		10V
C28	1-107-520-11	TANTAL. CHIP	33uF	20%	2.5V
C29	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C101	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C102	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C103	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C104	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C105	1-162-906-11	CERAMIC CHIP	1.5PF	0.25PF	50V
C106	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C107	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C108	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C109	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C110	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C111	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C112	1-164-345-11	CERAMIC CHIP	0.082uF	10%	25V
C113	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C114	1-162-970-91	CERAMIC CHIP	0.01uF	10%	25V
C115	1-162-970-91	CERAMIC CHIP	0.01uF	10%	25V
C116	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C119	1-110-967-11	TANTAL. CHIP	100uF	20%	4V
C120	1-107-811-11	TANTAL. CHIP	47uF	20%	4V
C121	1-110-967-11	TANTAL. CHIP	100uF	20%	4V
C122	1-107-811-11	TANTAL. CHIP	47uF	20%	4V
C123	1-115-156-11	CERAMIC CHIP	1uF		10V
C124	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C125	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< FILTER >			
CF1	1-781-666-11	FILTER, CERAMIC			
CF2	1-781-666-11	FILTER, CERAMIC			
CF3	1-767-312-71	FILTER, CERAMIC(DISCRIMINATOR)			
		< CONNECTOR >			
CN1	1-691-348-11	CONNECTOR, FFC/FPC (ZIF) 10P			
		< TRIMMER >			
CT1	1-141-615-21	CAP, ADJ (FM TRACKING)			
CT2	1-141-615-21	CAP, ADJ (FM FREQUENCY COVERAGE)			
		< DIODE >			
D101	8-713-100-11	DIODE 1T362			
D102	8-713-100-11	DIODE 1T362			
		< JACK >			
EP1	1-563-857-11	JACK, HEADPHONE (Ω)			
		< IC >			
IC1	8-759-362-23	IC TA7371AF-EL			
IC2	8-759-380-15	IC LA3550MTP-1			
IC3	8-759-822-48	IC LA4537M			
IC101	8-759-362-25	IC TA-2022AFN-EL			
		< COIL >			
L1	1-410-807-11	INDUCTOR	0.1uH		
L2	1-410-806-31	INDUCTOR	82nH		
L3	1-412-010-41	INDUCTOR CHIP	22uH		

Ref. No.	Part No.	Description			Remark
L4	1-412-010-41	INDUCTOR CHIP	22uH		
L5	1-412-987-31	INDUCTOR	4.7uH		
L6	1-412-987-31	INDUCTOR	4.7uH		
L7	1-412-987-31	INDUCTOR	4.7uH		
		< TRANSISTOR >			
Q101	8-729-423-52	TRANSISTOR	2SC3931-C		
Q102	8-729-423-52	TRANSISTOR	2SC3931-C		
Q103	8-729-800-71	TRANSISTOR	2SB815B7-TB		
Q104	8-729-800-71	TRANSISTOR	2SB815B7-TB		
Q105	8-729-037-71	TRANSISTOR	UN9210J-(TX).SO		
		< RESISTOR >			
R1	1-216-833-91	RES,CHIP	10K	5%	1/16W
R2	1-216-847-11	METAL CHIP	150K	5%	1/16W
R3	1-216-847-11	METAL CHIP	150K	5%	1/16W
R4	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R5	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R8	1-216-797-11	METAL CHIP	10	5%	1/16W
R9	1-216-829-11	RES, CHIP	4.7K	5%	1/16W
R30	1-216-811-11	RES, CHIP	150	5%	1/16W
R96	1-216-838-11	RES, CHIP	27K	5%	1/16W
R97	1-216-838-11	RES, CHIP	27K	5%	1/16W
R98	1-216-821-11	RES, CHIP	1K	5%	1/16W
R99	1-216-821-11	RES, CHIP	1K	5%	1/16W
R101	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (EXCEPT Panama)
R102	1-216-807-11	METAL CHIP	68	5%	1/16W (Panama)
R102	1-216-813-11	METAL CHIP	220	5%	1/16W (EXCEPT Panama)
R103	1-216-845-11	METAL CHIP	100K	5%	1/16W
R104	1-216-845-11	METAL CHIP	100K	5%	1/16W
R105	1-216-845-11	METAL CHIP	100K	5%	1/16W
R106	1-216-845-11	METAL CHIP	100K	5%	1/16W
R107	1-216-797-11	METAL CHIP	10	5%	1/16W
R108	1-216-837-11	METAL CHIP	22K	5%	1/16W
R109	1-216-813-11	METAL CHIP	220	5%	1/16W
R110	1-216-845-11	METAL CHIP	100K	5%	1/16W
R111	1-216-797-11	METAL CHIP	10	5%	1/16W
R112	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R113	1-216-835-11	METAL CHIP	15K	5%	1/16W
R114	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R115	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R116	1-216-843-11	METAL CHIP	68K	5%	1/16W
R117	1-216-843-11	METAL CHIP	68K	5%	1/16W
R118	1-216-821-11	METAL CHIP	1K	5%	1/16W
R119	1-216-821-11	METAL CHIP	1K	5%	1/16W
R120	1-216-805-11	METAL CHIP	47	5%	1/16W
R121	1-216-809-11	METAL CHIP	100	5%	1/16W
R122	1-216-833-91	RES,CHIP	10K	5%	1/16W
R123	1-216-833-91	RES,CHIP	10K	5%	1/16W
R124	1-216-815-11	METAL CHIP	330	5%	1/16W
		< VARIABLE RESISTOR >			
RV1	1-223-276-11	RES, ADJ, CERMET 22K (STEREO 19kHz)			
RV2	1-227-140-11	RES, VAR (VOL ◢)			

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
S1	1-571-275-11	SWITCH, SLIDE (FM SENS)			
S2	1-571-506-41	SWITCH, SLIDE (GROOVE/MEGA BASS/OFF)			
		< TRANSFORMER >			
T1	1-416-020-11	TRANSFORMER, IF (TV IFT) (FM IF)			
**********					
*	A-3683-122-A	MICROCOMPUTER BOARD, COMPLETE			
		**********			
		< BATTERY >			
BATT2	1-528-412-11	BATTERY, PAS SECONDARY			
		< CAPACITOR >			
C201	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C202	1-115-156-11	CERAMIC CHIP	1uF		10V
C203	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C204	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C205	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C206	1-115-156-11	CERAMIC CHIP	1uF		10V
C301	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C302	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C303	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C304	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C305	1-164-346-11	CERAMIC CHIP	1uF		16V
C311	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C312	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C313	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C314	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C315	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C316	1-164-362-11	CERAMIC CHIP	470PF	5%	50V
C317	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C318	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C319	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C320	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C321	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C323	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C324	1-115-156-11	CERAMIC CHIP	1uF		10V
C326	1-115-156-11	CERAMIC CHIP	1uF		10V
C327	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C328	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C329	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
		< CONNECTOR >			
CN201	1-691-351-11	CONNECTOR, FFC/FPC (ZIF) 13P			
CN202	1-691-348-11	CONNECTOR, FFC/FPC (ZIF) 10P			
		< DIODE >			
D301	8-719-073-01	DIODE	MA111-(K8).S0		
D303	8-719-420-87	DIODE	MA8130		
D305	8-719-049-09	DIODE	1SS367-T3SONY		
D306	8-719-049-09	DIODE	1SS367-T3SONY		
		< IC >			
IC201	8-759-530-11	IC	S-80812ANNP-E72-T2		

MICROCOMPUTER

Ref. No.	Part No.	Description				Remark
IC202	8-759-472-77	IC S-80810ANNP-E70-T2				
IC301	8-759-650-20	IC uPD17015GS-556-GJG				
IC302	8-759-650-21	IC S-8323A25MC-ELF-T2				
		< COIL >				
L303	1-419-311-21	INDUCTOR	100uH			
L304	1-410-393-11	INDUCTOR CHIP	100uH			
		< TRANSISTOR >				
Q301	8-729-402-13	TRANSISTOR	XN1501			
Q304	8-729-037-92	TRANSISTOR	2SD2216J-R(TX).SO			
Q305	8-729-037-92	TRANSISTOR	2SD2216J-R(TX).SO			
Q306	8-729-821-12	TRANSISTOR	2SB815B6B7.TB			
Q307	8-729-037-71	TRANSISTOR	UN9210J-(TX).SO			
Q308	8-729-037-92	TRANSISTOR	2SD2216J-R(TX).SO			
Q310	8-729-425-50	TRANSISTOR	2SB1462-Q			
		< RESISTOR >				
R201	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R202	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	
R203	1-216-857-11	METAL CHIP	1M	5%	1/16W	
R204	1-216-857-11	METAL CHIP	1M	5%	1/16W	
R205	1-216-837-11	METAL CHIP	22K	5%	1/16W	
R206	1-216-797-11	METAL CHIP	10	5%	1/16W	
R301	1-216-797-11	METAL CHIP	10	5%	1/16W	
R302	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R303	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R304	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R305	1-216-833-91	RES,CHIP	10K	5%	1/16W	
R306	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R307	1-216-833-91	RES,CHIP	10K	5%	1/16W	
R308	1-216-833-91	RES,CHIP	10K	5%	1/16W	
R309	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R310	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R311	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	
R312	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	
R313	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	
R316	1-216-857-11	METAL CHIP	1M	5%	1/16W	
R317	1-216-857-11	METAL CHIP	1M	5%	1/16W	
R318	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R319	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R320	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R321	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R330	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R331	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R332	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R333	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R334	1-216-857-11	METAL CHIP	1M	5%	1/16W	

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S201	1-692-088-11	SWITCH, TACTILE (HOLD)	
S202	1-692-088-11	SWITCH, TACTILE (POWER (AUTO OFF))	
S203	1-692-088-11	SWITCH, TACTILE (MODE)	
S205	1-475-240-12	ENCODER, ROTARY (JOG)	
		< TRANSFORMER >	
T301	1-449-021-21	COIL, DC/DC CONVERTER	
		< VIBRATOR >	
X201	1-767-388-11	VIBRATOR, CRYSTAL (75kHz)	

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MISCELLANEOUS
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5	1-676-005-11	FLEXIBLE BOARD(B-B)
23	1-676-004-11	FLEXIBLE BOARD(B-E)
BATT2	1-528-412-11	BATTERY, PAS SECONDARY
LCD201	1-803-816-11	DISPLAY PANEL, LIQUID CRYSTAL
S205	1-475-240-12	ENCODER, ROTARY (JOG)

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ACCESSORIES & PACKING MATERIALS
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	3-867-758-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE, CHINESE)
	3-867-758-21	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN, FINNISH)(AEP)
	8-953-187-90	HEADPHONE MDR-ED136

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